

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-021955**Date Inspected:** 18-Mar-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 1500**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** ShangHai, China**CWI Name:** Sha Zhi**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

Summary of Items Observed: On this date Caltrans OSM Quality Assurance(QA) Inspector, DJ Shin was present during the times noted above for observations relative to the work being performed.

**Bay 1**

Heat straightening of PCMK, 20TR2-037, under approved Heat Straightening procedure, HSR (B)-461, The in process temperature was at the time of this observation witnessed at less than 600°C. The ZPMC QC was identified as Tian Lei. The approved HSR procedure stated that a maximum temperature of 650°C with 1-3 applications. The distortion that was previously measured and recorded on the HSR was Maximum 80mm.

**Bay 8**

This QA Inspector observed the following work in progress for Bay 8.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Liu Chuan Gang.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specifications (WPS). Listed below are the locations that were identified by this QA inspector.

Components: Bike Path

PCMK: BK004A5-062-110,111,113,114

Welder: 054459

WPS-B-P-2213-TC-U4b-FCM-1

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Bay 10

This QA Inspector observed the following work in progress for Bay 10.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Liu Sun Zi Wang.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specifications (WPS). Listed below are the locations that were identified by this QA inspector.

Components: Bike Path

PCMK: BK010A1-001-043

Welder: 040302

WPS-B-T-2232-ESAB

PCMK: BK3001-001-004

Welder: 040365

WPS-B-T-2231-ESAB

PCMK: BK17B-001-017

Welder: 057266

WPS-B-T-2231-ESAB

PCMK: BK3001-001-051

Welder: 040367

WPS-B-T-2233-ESAB

This QA Inspector observed the following work in progress for Bay 10.

ZPMC was using the Shield Metal Arc Welding (SMAW) process.

ZPMC QC is identified as Sun Zi Wang.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS). Listed below are the locations that were identified by this QA inspector

Components: Bike Path

PCMK: BK010A1-001-044

Welder: 056364, 057258

WPS-B-P-2211-B-U2

PCMK: BK17B-001-013

Welder: 040581

WPS-B-P-2213-TC-U4C

This QA Inspector observed the following work in progress for Bay 10.

ZPMC was using the Submerged Arc Welding (SAW) process.

ZPMC QC is identified as Sun Zi Wang.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS). Listed below are the locations that were identified by this QA inspector

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Components: Bike Path  
PCMK: BK15B-001-004  
Welder: 050295  
WPS-B-T-2221-TC-U4a-S

### Trial Assembly Yard

This QA Inspector observed the following work in progress for Trial Assembly Yard.

ZPMC was using the Shield Metal Arc Welding (SMAW) process.

ZPMC QC is identified as Zhu Zhong Hai.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector

Components: 13AE  
PCMK: SEG3007A-007  
Welder: 067610  
WPS-B-P-2214-B-U2-FCM

PCMK: Base Metal repair support jig remove area  
Welder: 200113  
Report: B-CWR-2861  
WPS-345-SMAW-4G (4F)-FCM-repair

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



### Summary of Conversations:

No relevant conversations

### Comments

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This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Shin,DJ	Quality Assurance Inspector
<b>Reviewed By:</b>	Riley,Ken	QA Reviewer

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